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CMFRI Newsletter

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Dr. A. Gopalakrishnan, Director receiving the ICAR Best Annual Report Award
from Shri. Radha Mohan Singh, Union Agriculture Minister

see page 4



हर कदम, हर डगर
किसानों का हमसाथ
भारतीय कृषि अनुसंधान परिषद

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Indian Council of Agricultural Research
CENTRAL MARINE FISHERIES RESEARCH INSTITUTE
P.B. No. 1603, Ernakulam North P.O., Kochi - 682 018, Kerala, India

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Published by

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DIRECTOR SPEAKS



Warm greetings to all.

During the quarter, the institute has successfully completed the Marine Fisheries Census 2016 exercise of collecting data from nearly 9 lakh households regarding

manpower, demography, technology and infrastructure availability pertaining to the marine fisheries sector. We were also actively involved in organizing a series of Stakeholders' Workshops in various parts of the country as part of formulation of the new 'National Marine Fisheries Policy' by the Government of India. Both the tasks were entrusted to the institute by the Department of Animal Husbandry, Dairying and Fisheries (DADF). It is a matter of pride that the institute has also bagged ICAR's Best Annual Report in the Large Institute Category for the year 2014 -15. This should motivate further focused research and dissemination of knowledge to the stakeholders in the marine fisheries sector of India. Several training programmes in marine fish culture and related activities were conducted during this period. It is anticipated that the positive impacts created through such programmes by enhancing skills and livelihood options for fishermen will result in higher adoption of mariculture technologies and increase marine fish production in the coming years. This premier marine fisheries research institute was set up on 3rd February 1947 and is now stepping into its seventh decade. The tasks ahead are numerous and it is important that we jointly strive to achieve the targets set for the making of a vibrant and sustainable marine fisheries sector. I wish all readers a successful quarter ahead.

A. Gopalakrishnan
Director

About ICAR-CMFRI

The Central Marine Fisheries Research Institute, Kochi, is a premier research Institute under the Indian Council of Agricultural Research, devoted to research and training in marine fisheries and mariculture.

ICAR-CMFRI has three Regional Centres viz., Mandapam Camp, Visakhapatnam and Veraval and seven Research Centres located along the Indian coastline, catering to the marine fishery policy needs of all maritime states of the country.



Dr. Trilochan Mohapatra takes charge as Director-General, ICAR

Renowned scientist Dr. Trilochan Mohapatra took over the charge of Secretary, Department of Agricultural Research and Education & Director-General, ICAR on 22nd February 2016. Dr. Mohapatra was holding the position of Director-cum-Vice Chancellor of the prestigious Indian Agricultural Research Institute, New Delhi. Prior to this, he served as the Director of National Rice Research Institute (formerly CRRI), Cuttack.

A scientist of global repute working in the area of molecular genetics and genomics, Dr. Mohapatra has over 145 research papers in leading national and international journals including *Nature* and several book chapters to his credit. His research accomplishments include development of the first high yielding Basmati rice variety resistant to bacterial leaf blight through molecular marker assisted selection, physical mapping and genome sequencing of rice and tomato. He is a Fellow of the Indian National Science Academy (INSA), National Academy of Sciences, India (NASI) and the National Academy of Agricultural Sciences, (NAAS), New Delhi.



Marine Fisheries Census - 2016

Marine Fisheries Census - 2016 was successfully carried out in all the maritime states - Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha, West Bengal : and the UTs of Daman & Diu and Puducherry in a duration of 30 days from 1st February, 2016. The census focused on gathering information on fishermen population, their socio-economic condition, educational and occupational profile, ownership of crafts and gears, migration to other states for fishing related activities, use of fishing and life-saving equipments and demographic features of the marine fishing villages. This exercise was partially funded by Department of Animal Husbandry, Dairying and Fisheries (DADF), Ministry of Agriculture and Farmers Welfare, Government of India. The massive



Dr. Gopalakrishnan, Director, inspecting the Marine Fisheries Census activities at Thangachimadam

exercise was co-ordinated and executed by ICAR-CMFRI through its regional, research and field centres located along the coast. There were mainly three types of schedules for gathering the information at various levels. Schedule-I was for collecting information at the household level and prepared in eight regional languages, namely Gujarati, Marathi, Kannada, Malayalam, Tamil, Telugu, Odiya and Bengali, in addition to English and Hindi. Demographic features of marine fishing villages were collected using Schedule-II. Form a-e of schedule-II were used for collecting the information

on fisheries related infrastructure facilities existing in the fishing villages like boat building cum repairing yards, ice factories, cold storages, freezing plants, processing plants, fish curing yards etc. Schedule-III was used for collecting the information about the fishing crafts in the marine fish landing centres. The overall co-ordination of census operation was done by Director, ICAR-CMFRI assisted by Head, Fishery Resources Assessment Division. To ensure maximum reliability and validity, supervision of data collection by the suitably trained scientific and technical staff of the institute was carried



Census data verification by FRAD Scientists



Enumerators collecting data from fishermen at Uvari, Tirunelveli



Census enumeration at Kasimedu, Chennai

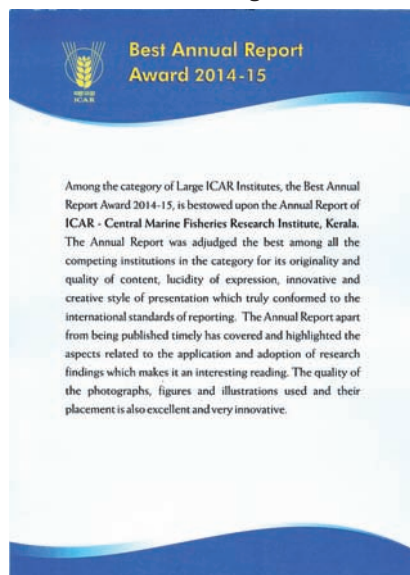
out at the field, district and state level. The census operation which collected

information from 882,263 households spread across 4057 marine fishing villages

along the mainland was successfully completed on 1st March, 2016.

CMFRI bags ICAR Best Annual Report Award for 2014-15

The Best Annual Report Award 2014-15 in the category of Large ICAR Institutes was bestowed on ICAR-Central Marine Fisheries Research Institute, Kerala. The award was received by Dr. A. Gopalakrishnan, Director from Shri. Radha Mohan Singh, Hon' Union



Minister of Agriculture at a function held in New Delhi on 23rd January, 2016. The report was adjudged best among all competing institutions in the category for

its 'originality and quality of content, conforming to international standards of reporting' as mentioned in the citation awarded.

An agreement was signed with the Commissioner of Fisheries, Gujarat on 29th January 2016 to initiate a Consultancy Project on 'Artificial Fish Habitat based Marine Ecosystem Restoration in the inshore areas off Bhadreswar, Kutch District, Gujarat' by the Veraval Regional Centre of ICAR-CMFRI, with an outlay of ₹ 365 lakhs.

TSP benefit handed over to Tribal Fish farmers



Tribal Sub-Plan (TSP) meeting was held at the Mangalore Research Centre on 26th January 2016 which was attended by the tribals involved in fish culture at Mulki. On the occasion a cheque for ₹ 164,230 realised from the sale proceeds of fish harvest under TSP, was handed over to the tribal group.

New species of Copepod for live feed identified

A new species of cyclopod copepod was isolated and identified that can be used as a live feed for finfish and shellfish larvae. The cyclopod copepod was collected from sea off Karwar using plankton net (120 μm mesh size) and found to be a new species belonging to the genus, *Metacyclops*. Species identification was confirmed using

conventional and molecular taxonomy methods. Successive generations were maintained. Egg bearing copepods had overall hatching rate of 85%. Based on the smaller size range of nauplii (70 μm) and copepodites (220 μm), this copepod was found to be suitable as feed for fish and shrimp larvae. The size of nauplii and hatching rate were found to vary significantly with the algal diets. It was observed that the size of nauplii was minimum when fed with *Isochrysis galbana*. This species also tolerates a wide range of salinity of 5-35‰. Experiments with finfish and shellfish larvae of Asian seabass, cobia and milk fish proved it to be a highly suitable live feed.



(Reported by: Jayasree Loka, S.M Sonali, Sandhya Sukumaran and B.Santosh)

Satellite Telemetry Studies on migration patterns of Tunas in the Indian Ocean

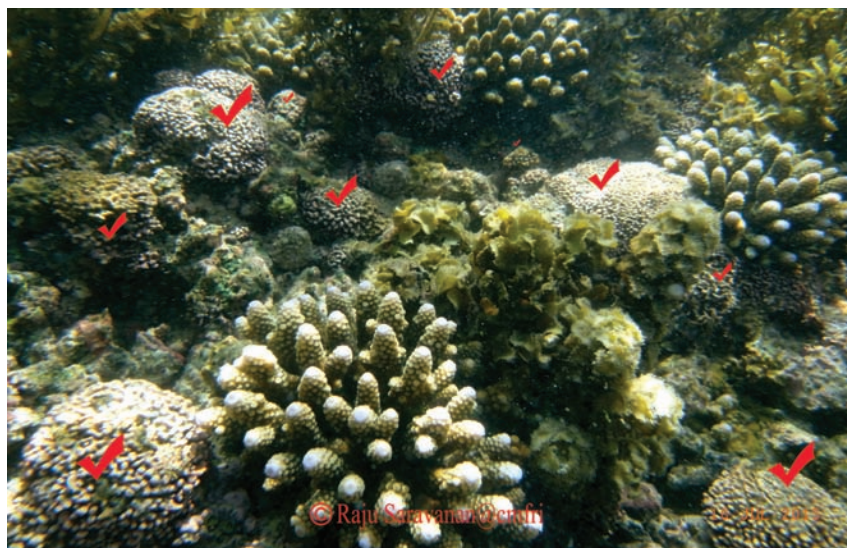
Satellite tags were deployed on eight large sized yellow fin tunas of size range 107-127 cms at Kavaratti, Lakshadweep during 16th - 22nd March 2016. The water parameters were recorded by CTD (Conductivity, Temperature, Depth) operations at each tagging location and plankton were also collected for analysis. Finlets were collected from the tunas for DNA based studies on tuna stocks and their migration patterns.

(Reported by: Dr. Prathibha Rohit, Mangalore RC)



Collecting finlets of tagged tuna for DNA studies

SCUBA Survey in Palk Bay reveals existence of Rhodolith beds off Pamban Island



Rhodolith beds off Pamban Island

A SCUBA survey was conducted by the team around Pamban island in a 10 km stretch of coastal water off Agni theertham to Pamban Light House. It revealed the existence of calcareous red algae commonly called Maërl or Rhodolith, in almost all the surveyed stations. Rhodoliths are nodules of free living, non-geniculate coralline red algae (Corallinales, Rhodophyta). Rhodolith beds harbour epibenthic, cryptofaunal and infaunal communities and are considered to be a critical habitat in the marine realm. This study recorded for the first time the distribution of Rhodolith beds in Palk Bay in the 1-5 metre depth zone.

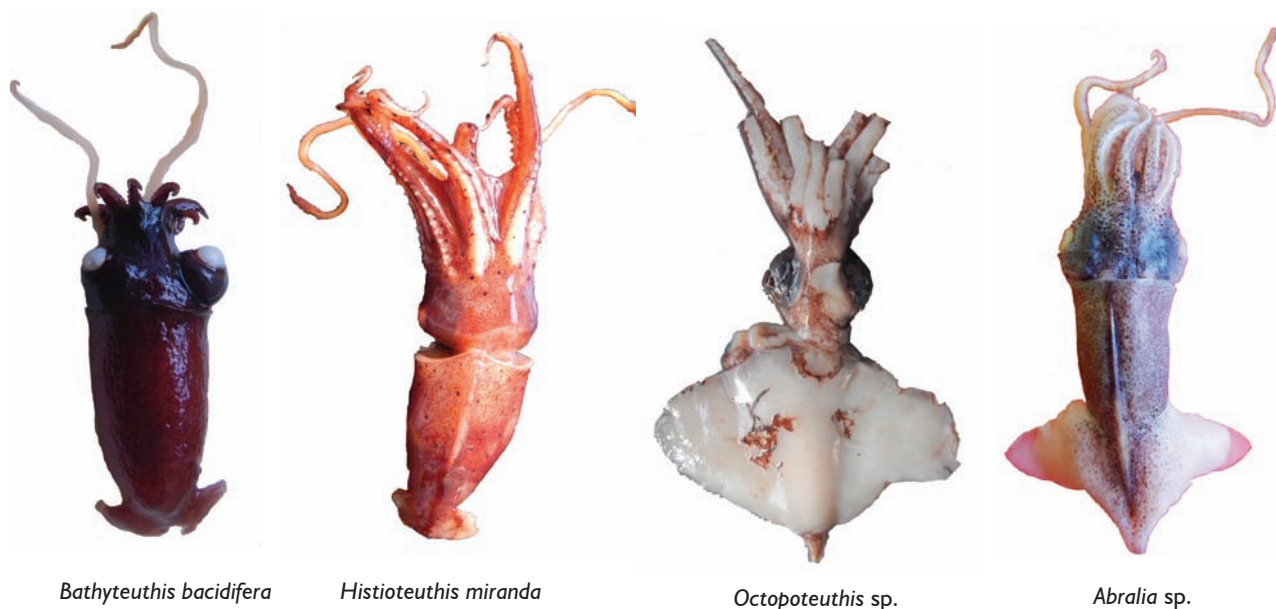
(Reported by R. Saravanan, L. Ranjith and S. Jasmine, Marine Biodiversity Division)

Oceanic squid survey in Lakshadweep

An oceanic squid survey cruise for exploration of *Sthenoteuthis oualaniensis* covering four stations

January 2016 on-board *FV Silver Pompano*. The macrozooplankton samples were collected from all the

some rare squids such as *Bathyteuthis bacidifera*, *Histioteuthis miranda*, *Octopoteuthis* sp., and *Abralia* sp.



Adults of deep-sea squids

(Station 1- 10°19'11"N; 73°36'7"E depth: 2030 m, Station 2-11°5'49"N; 72°13'22"E depth: 670 m, Station 3-9°37'29"N; 71°45'35"E depth: 2342 m, Station 4- 9°56'37"N; 74°0'24"E depth: 3500 m) around Lakshadweep Islands was conducted during 11th -16th

stations using IKMT (Isaacs –Kidd Midwater Trawl) net towed horizontally at 10 m depths in each station. Using lights in the night aggregated large amounts of oceanic squids, but these could not be caught. However, during the trawl operations (depth 135-200 m),

were successfully collected. The paralarvae of oceanic squids viz. *Sthenoteuthis oualaniensis* (Rhyncoteuthion), *Ancistrocheirus lesueurii*, *Abraliopsis* sp., *Abralia* sp. etc. were also caught.

(Reported by Molluscan Fisheries Division)

Sea slugs washed ashore

Large numbers of the sea slug *Glaucus atlanticus* were washed ashore on Puri coast, Odisha during the low tide on 22nd February 2016. They were alive and crawling on the shore. Such phenomenon reportedly occur very rarely and is reported for the first time from Odisha coast. This nudibranch is pelagic, and occurs in temperate and tropical seas. In India, it has been recorded from the coast of Andhra Pradesh and Tamil Nadu and this report from Odisha coast extends its distribution. Although these sea slugs live in the open ocean, sometimes they are accidentally washed to the shore, as

probably occurred on Puri coast. It is silvery grey on its dorsal side and pale blue/black ventrally. Tapering body was flattened with six appendages which branch out like fingers. It reportedly feeds on venomous cnidarians and stores their stinging nematocysts within its own tissues as defense against predation. Humans handling or coming in contact with the slug may therefore receive a very painful and potentially dangerous sting. As Puri coast is mostly used by the tourists for recreation like bathing in the sea, whether the appearance of sea slugs will have any adverse impact is a concern.

(Reported by: Dr. Reeta Jayasankar,



Glaucus atlanticus

Puri Field Centre)

Clam biomass surveys

Clam biomass surveys carried out in the five zones of Ashtamudi Lake during 24th- 27th February, 2016 indicated poor stock in clam beds which can be attributed to either non-synchronous spawning/early spawning. Late spawning is expected to rebuild stocks at par with last year's stock levels or to higher levels.

Stakeholders' Meet on National Marine Fisheries Policy

As part of framing the National Marine Fisheries Policy (NMFP) 2016, the ICAR-Central Marine Fisheries Research Institute organized Stakeholders' Meets at its various centres. The first Meet, covering the states of Gujarat, Maharashtra and Goa, was conducted at the Mumbai Research Centre on 25th January 2016. Dr K. Sunil Mohamed, Principal Scientist, ICAR-CMFRI, Dr. Prem Chand, Director-General, Fishery Survey of India, State Fisheries Department officials and fishermen representatives from the three States participated in the Meet.

Second Stakeholders' Meet for Kerala and Karnataka was held on 2nd February, 2016 at CIFNET, Kochi. The third of its kind was organized by the Madras Research Centre of ICAR-CMFRI on 9th February, 2016 for the stakeholders from Tamil Nadu and Puducherry. The



Dr. A Gopalakrishnan, Director ICAR-CMFRI, chairing stakeholders' Meet on National Marine Fisheries Policy at the Visakhapatnam Regional Centre

Dr. A Gopalakrishnan, Director ICAR-CMFRI, led the stakeholders' meeting at the Visakhapatnam Regional Centre on February 11, 2016 where nearly 120 fishermen from Andhra Pradesh, Odisha and West Bengal participated in the meeting. Dr. Ramalingam, Zonal Director, Fishery

Survey of India; Mr. Bimal K Das, Deputy Director of Fisheries, Odisha; Mr. Sanjay Pandey, DADF; Dr. K Sunil Mohamed, and Dr. T. V. Sathianandan, Principal Scientists, ICAR- CMFRI were also present. Similar meeting to elicit views from stakeholders in Gujarat was held on 23rd February, 2016 at the Veraval Regional Centre.



Stakeholders' Meet organised by Chennai Research Centre

meeting was chaired by Dr. Y. S. Yadava, Director, BOBP-IGO and Member, NMFP Committee. Other dignitaries included Dr. Paul Pandian, Commissioner, Fisheries Development, DADF, Dr. Gopal Krishna, Director, ICAR-CIFE & Member, NMFP Committee, Dr. Ramalingam representing DG, FSI and Thiru Mohanasundaram, AD (Fisheries), Tamil Nadu. Participants included fishermen leaders from the districts of Thiruvallur, Chennai, Rameswaram, Thoothukudi, Kanyakumari in Tamil Nadu and the UT of Puducherry besides NGOs like ICSF and SIFFS.



Stakeholders' Meet organised by Mumbai Research Centre

RAC meeting at Headquarters

The 20th Research Advisory Committee (RAC) meeting was held on 28th and 29th March, 2016 at Headquarters in Kochi. Dr. B. N. Desai, Ex Director, NIO chaired the meeting. Other members included Dr. Alfred Selvakumar, Ex ADG (Marine Fisheries), ICAR, Dr. Praveen Puthran, ADG (M.Fy), ICAR, Dr. E. Vivekanandan, Principal Scientist (Retd.), ICAR-CMFRI Dr. A. Gopalakrishnan, Director, ICAR-CMFRI and Dr. P.U. Zacharia, Member-Secretary, RAC. The Heads of Divisions and Scientists in Charge of the various Regional Research Centres of the institute made presentations of their activities and achievements of the Division and Centres respectively.



RAC meeting in progress

MoU signed for higher education and collaborative research

A Memorandum of Understanding (MoU) was signed between ICAR-Central Marine Fisheries Research Institute and Nansen Environmental Research Centre - India (NERCI) on 3rd February, 2016 to develop long term co-operation in higher education and collaborative research on ocean characteristics, remote sensing, climate variability and marine living resources. The MoU was signed by Dr. A. Gopalakrishnan, Director, ICAR-CMFRI, Dr. K. Ajith Joseph, Executive Director, NERCI and Prof. N. R. Menon, Co-Chairman, NERCI. NERCI is a non-profit research centre, within the Nansen Group of research centres, registered with Department of Scientific and Industrial Research of Ministry of Science and Technology, Govt. of India as an



Dr. A. Gopalakrishnan, Director and Prof. N. R. Menon signing the MoU between ICAR-CMFRI and NERCI

Industrial Research Organization. The MoU shall remain in force for a period of

five years from the date of signing of this agreement.

MSC conducts Annual Surveillance Audit

The Annual Surveillance Audit of the MSC certified Short-neck clam fisheries of Ashtamudi lake was done on 14th March 2016. The surveillance team comprising Dr. Jim Andrews of Acoura Marine, UK, Dr. K. K. Appukuttan, former Head, Molluscan Fisheries Division, ICAR-CMFRI and Dr. K. S. Mohamed, Head, MFD visited Ashtamudi Lake and had interactions with clam fishers and fishery managers. The audit report is awaited.

Oysters as innovative food

Molluscan Fisheries Division took the lead in promoting oysters as a healthy food among fish consumers. Mazhavil Manorama TV channel covered Oysters under "DE CHEF" a cookery programme on 10th March 2016. Smt. Seethalakshmi Oyster fisher from Kunjithai, Kochi participated in this programme and narrated local beliefs on the health benefits of oyster consumption. An Oyster recipe based cookery competition was also held under the leadership of Chef Jose Varkey of Casino Hotels, Kochi which was telecast on 30th April, 2016.

ICAR-Winter School on Mariculture



Release of Course Manual at the inaugural function

A Winter School on 'Technological Advances in Mariculture for Production Enhancement and Sustainability' was organized by the Mariculture Division during 5th-25th January, 2016. There were 21 participants from ICAR institutes and Universities who were given exposure on various aspects in Mariculture by experts from ICAR-CMFRI as well as other research organisations and Institutes. In addition to field and farm

visits, a four days study tour to the Mandapam Regional Centre was also arranged.

Winter School was inaugurated by Dr. C. N. Ravishankar, Director, ICAR-CIFT. Dr. A. Gopalakrishnan, Director, ICAR-CMFRI, presided over the function. Dr. G. Gopakumar, Former Head, Mariculture Division delivered felicitation address. Dr. Imelda Joseph, Course Director welcomed the invitees and

participants. Dr. S. Girija, Director, National Institute of Fisheries Post-Harvest Technology and Training (NIFPHATT) was the Chief Guest for the valedictory function held on 25th January, 2016. During the function, Dr. Imelda Joseph, Course Director, presented a review of the Winter School while participants expressed their observations. Dr. Bobby Ignatius, Course Co-ordinator delivered vote of thanks.

(Reported by : Mariculture Divisions)

Ornamental fish culture by fisherwomen SHGs in Ramanathapuram district: A success story

The Mandapam Regional Centre of ICAR-CMFRI has scripted a success story in adoption of ornamental fish culture by the fisherwomen SHGs in Ramanathapuram district, Tamil Nadu. The Centre provided technical guidance on various aspects of ornamental fish culture to the fishers in different villages in the district, under the GOMBRT funded project 'Capacity building on seed production of selected marine ornamental fishes to fisherwomen in Gulf of Mannar region'. Most of the fisherwomen who were trained at the Centre are playing a major role in boosting the ornamental fish production in the district.

Out of the 66 fishers, who were trained during the year 2014-15, 23 members from Thangachimadam village received 50 per cent subsidy from the State Fisheries Department, Ramanathapuram under NFDB scheme to start the ornamental fish production.

Similarly, from the 37 fishers trained during 28th - 30th October 2015, five from Mandapam have initiated the marine ornamental fish culture with their own investment. Percula, sebae and fire clown brooders were handed over to the group from Mandapam on 24th March 2016. As an encouragement to the Self Help Group members, half-inch sized juveniles

were also supplied. They grow these to one inch size within a period of 45 days before marketing it. As an alternate livelihood option, this has helped the women groups to attain economic empowerment and enhanced their decision making ability. In the long run, this will pave the way for hatchery produced ornamental fish trade.



Dr. A. Gopalakrishnan, Director, visiting the ornamental hatchery unit at Thangachimadam

Distribution of hatchery produced cobia seeds

The State Fisheries Department of Tamil Nadu under their FIMSUL-II project 'Fisheries and Livelihood programme' identified four fishermen groups in Ramanathapuram district for undertaking the sea cage farming at Thangachimadam. In this connection, cobia seed distribution programme was

conducted on 23rd February 2016 at Mandapam Regional Centre of ICAR-CMFRI. Dr. A. Gopalakrishnan, Director, presided over the function and handed over 3000 numbers of cobia fingerlings to the fishermen groups. Dr. A. K. Abdul Nazar, Scientist-in-Charge delivered the welcome address and briefed the cage

farming activities in the district. Shri. M. Kasinathapandian, Deputy Director of Fisheries, Ramanathapuram and Dr. Bobby Ignatius, Principal Scientist, ICAR-CMFRI, Kochi gave felicitations. Dr. R. Jayakumar, Senior Scientist proposed the vote of thanks. Dr. B. Johnson, Scientist, co-ordinated the event.



Dr. A. Gopalakrishnan, Director, handing over the cobia fingerlings to the fishermen group



Releasing on cobia fingerlings into the cage

Trial farming of Blue Swimmer Crab

Under the All India Network Project (AINP) a trial farming of Blue swimmer crab, *Portunus pelagicus* in a pen was initiated in a participatory mode with fishermen group at Vedalai village, Ramanathapuram district on 6th February 2016. A 10×10 feet pen installed using casuarina poles was stocked with around 4,000 numbers of crablets reared at the Mandapam Regional Centre of ICAR-CMFRI. Feeding, daily maintenance, watch and ward will be carried out by the fishermen group and farming is progressing well.

(Reported by : Mandapam Regional Centre)



Handing over of the crablets to the farmer

Turtle Release and Biodiversity Conservation Campaign

The Marine Biodiversity Division participated in three Turtle Release campaigns held in different parts of Kerala. The team was able to create awareness among public about importance of turtle conservation. A three member team headed by Dr. K. K. Joshi, Principal Scientist, Mr. Sreekumar K. M. and Mr. Thobias P. Antony participated in the function organized by Green Roots Nature Conservation, Thottapally on 31st

January 2016. The club members had collected 121 eggs of Olive Ridley turtle which after 48 days incubation in a specially designed hatchery at Thottapally beach were released into the sea. Mr. N. Padmakumar, Alappuzha District Collector, G. Sudhakaran, MLA, Mr. S. Sreekumar, Assistant Forest Conservator and Dr. K. K. Joshi, Head, Marine Biodiversity Division, ICAR-CMFRI were present. Around 200 people including children and youngsters were present at

the release site to witness the event. Similar functions were held at Palapetty, Thrissur on 2nd March, 2016 and at Thottapally on 19th March 2016 in association with local turtle conservation groups. The team from ICAR-CMFRI comprised Dr. Miriam Paul Sreeram, Dr. Molly Varghese Mr. Aju K. Raju, Mr. K. M. Sreekumar, Ms. M. Sethulakshmi, Mrs. K. A. Divya and Mr. Thobias P. Antony.

Mass stranding of Short-finned pilot whales

Mass stranding of 147 short-finned pilot whale *Globicephala macrorhynchus* was reported from Manapad coast, Gulf of Mannar on 14th January, 1973. After 43 years, precisely in the same region of Manapad coast, mass stranding of 81 short-finned pilot whales was observed from 11th to 15th January, 2016. Short-finned pilot whales were first stranded alive at Alanthalai-Pathuvai Nagar beach on 11th January afternoon. By night, nearly 40 were washed ashore alive. On 12th January morning 81 pilot whales had stranded along the Kallamozhi-Kulasekharapatnam-Manapad coastal stretch. Of these, 45 were dead by afternoon despite efforts to save them. By evening, the carcasses were buried along the shore. On 13th January morning, carcasses of 28 whales were found on the Manapad beach. By evening, all the carcasses were buried along the coast (Kallamozhi - Manapad). Again, carcasses of two pilot whales were washed ashore at Kooduthalai coast on 15th January morning. Altogether 75 dead



pilot whales were stranded along the Manapad coast. The fate of 6 female pilot whales which were pushed back to sea was unknown. There were no visible marks of injury, deformity or any external parasite on the body of the dead whales and all looked normal and healthy. A team of scientists from ICAR-CMFRI Thoothukudi, Mandapam and Kochi centres visited the mass stranding site and

collected the morphological measurements and biological samples. Necropsy was done by the team from Mandapam comprising Dr. Sakthivel and Dr. Rameshkumar. Several causes for mass stranding of the pilot whales are being analysed.

(Compiled by : R. Jeyabaskaran with inputs from Tuticorin Research Centre & Mandapam Regional Centre)

Rescue centre for stranded cetaceans

Central Marine Fisheries Research Institute in collaboration with Mangrove Cell of Maharashtra Forest Department carried out a funded project (GOI-UNDP-GEF) on capacity building of authorities and fisher folks of Sindhudurg district of Maharashtra in dealing with stranded cetaceans (whales, dolphins and porpoises). A total of 56 officials from various departments and 87 local people from coastal villages were trained. Realizing the need for timely

communication and prompt action, a network was established among various departments involved ensuring their responsibilities in dealing with stranding of cetaceans and to maintain a database of such strandings. This network was successful in rescue of a stranded spinner dolphin, *Stenella longirostris* at Kalbadevi beach, Ratnagiri district, Maharashtra. On 11th September 2014. In view of the increased incidents of marine mammal stranding along the coastal stretch of

Sindhudurg district, the Maharashtra Forest Department has decided to set up a fully equipped rescue centre for stranded cetaceans at Tarkarli, Malvan Taluk, Sindhudurg district under the technical guidance of ICAR-CMFRI. This rescue centre would serve as a model centre and facilitate timely response to any such cetacean stranding in future.

(Reported by Sakthivel M., Mandapam Regional Centre, Ramkumar S., Vaibhav D. Mhatre, David Sawant & Kishor Mainkar, Mumbai Research Centre)

Stranding of a Baleen Whale

A carcass of a baleen whale was washed ashore at Juhu beach, Mumbai on 29th January, 2016. Identified as a male Bryde's whale, *Balaenoptera edeni* it measured 11.3 m and weighed about 20 t. Samples were collected by veterinary doctors for post-mortem analysis to find out reason for death. Whale carcass was later buried on the beach under the observation of the Forest Department.

(Reported by: V. V. Singh, Ramkumar S. B. A. Shiledar, K.R. Mainkar, V.D. Mhatre, Swapnil and Dhanashree, Mumbai Research Centre)



Open house at ICAR-CMFRI

As part of the 69th Foundation Day celebrations on 3rd February, 2016, the ICAR-CMFRI organised Open House at Headquarters and its various Regional Research Centres.



Students at Kovalam Field Lab, Chennai



Chief Guest in Oyster hatchery at Tuticorin Research Centre

Students from schools and colleges across the state visited the Headquarters and its various labs. Several species of marine life including corals and pearls were on display at the Marine Biodiversity museum. The different Divisions in the institute showcased their research activities and technologies developed. The marine aquarium, exhibition of fishes at the Biology laboratory, cage farming technologies and the stalls of Agricultural Technology Management Centre (ATIC) selling various products related to organic farming practices developed by the KVK of ICAR-CMFRI generated interest in the visitors. More than 2,500 students from

various schools and colleges, researchers and teachers visited the venue.

At Mandapam Regional centre several hundred students from the schools and colleges of Ramanathapuram district visited the aquarium and museum. The awareness on marine resource conservation, biodiversity issues, mariculture activities and aquarium keeping was given to the students. Tuticorin Research Centre, Thoothukudi kept open its research laboratories and other facilities to the public on the day. To create awareness among the school and college students a special session on the "Conservation of Sea Turtles" was organised in collaboration with the Fisheries Department, Thoothukudi.

bivalves, fishes etc. were also displayed for the students to observe.

At the Mangalore Research Centre an exhibition was organised on 3rd February, 2016. Children from 8 local schools visited the centre. Technologies pertaining to mussel and finfish culture developed and popularised by the institute were displayed using miniature models. ICAR-Mumbai Research Centre of CMFRI celebrated Foundation Day at Dr. D. V. Bal Auditorium, ICAR-CIFE old campus, Versova on 3rd February 2016. Dr. Gopal Krishna, Director and Vice-Chancellor, ICAR-CIFE delivered guest lecture. Dr. Navin M. Shah, Former Professor, Cochin University of Science & Technology shared his research experiences with the audience.



Students watch exhibits in ATIC

The Madras Research Centre, Chennai organized Open House at its Kovalam Field Laboratory on 12 February 2016. Nearly 600 students from the high school sections of two Government schools in Kelambakkam visited the Field lab and learnt about the scientific activities of the Centre. Equipments used in routine research work carried out by the various Divisions were displayed and explained to the students. Live marine organisms such as crustaceans, molluscan



Display of fishes at Headquarters



Mariculture activities exhibition at HQ



Visitors at Marine Reef Aquarium, Mandapam Regional Centre

National Consultation Meet on Seaweeds



Director addressing Consultation Meet on Seaweeds

A National Consultation Meet on 'Mariculture, Utilization and Value addition of Seaweeds for Livelihood Security of Coastal Population' was conducted on 18th February 2016 at ICAR-CMFRI, Kochi with financial support from the Department of Biotechnology (DBT), New Delhi. 25 Scientists including 15 invited experts participated.

The Consultation Meet was inaugurated by Dr. A. S. Ninawe, Advisor, DBT and presided by Dr. A. Gopalakrishnan, Director, ICAR-CMFRI. Dr. N. Kaliaperumal, Former Scientist in Charge of Mandapam Regional centre of ICAR-CMFRI and Shri Abhiram Seth,

Managing Director of AquAgri Ltd offered felicitations.

The Technical Presentations were moderated by Dr. G. Gopakumar (ICAR-Emeritus Scientist), Dr. M. Baluswamy (KIA, Chennai), Dr A. S. Ninawe (Advisor, DBT), Sri. Abhiram Seth (Managing Director, AquAgri Ltd) and Dr. V. Kripa, Principal Scientist, Fishery Environment Management Division, ICAR-CMFRI.

After the technical presentations and in-depth deliberations the following priority areas were identified for developing a network programme:

1. Integrated Multi Trophic Aquaculture (IMTA) - further refining for areas with high tidal amplitudes and horizontal expansion
2. Integrated Taxonomic approaches for documenting the seaweed resources of India
3. Development of stress resistant and genetically improved high yielding strains of commercially important seaweeds for improving livelihood options of coastal communities
4. Bio prospecting of novel molecules from marine algae of native origin for industrial and health applications.

Workshop on Mud Crab Farming

A Project Report Finalisation Workshop of the GOM-GIZ-CMPA Project 'A strategic assessment of mud crab farming potential in brackishwater stretches between Velas and Dabhol in the Ratnagiri District of Maharashtra' was organized on 15th March, 2016 at Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri. The officials of GIZ-CMPA-Maharashtra Project from the Mangrove Cell, Mumbai, representatives from the Forest Department and coastal communities of Anjarle, Kelshi, Aade, Velas and Ansure



Inauguration of Workshop by Chief Guest Mr. Sandesh Devkar, Panchayat President, Anjarle village

villages also participated in the Workshop.

Mr. Sandesh Devkar, Panchayat President from Anjarle village who was the Chief Guest inaugurated the Workshop and spoke on the livelihood avenues of coastal communities in Ratnagiri District. Shri Prashant Gawkar, Vice-President of Ansure village Panchayat gave the felicitation. Shri

Bhaskar Paul, Programme Officer, GIZ-CMPA-Maharashtra Project urged the participants from various coastal villages to reap the benefits of natural mangrove habitats for farming mud crab with the support of ICAR-CMFRI and the Mangrove Cell, Mumbai.

(Reported by : Dr. K. Vinod, Calicut Research Centre)



Group Exercises by participants

Interactive Co-Learning Workshop on Philosophy, Methods and Ethics in Science

The third workshop of the series of Interactive Co-learning Workshop on *Philosophy Methods and Ethics in Science* was conducted during 19-21 January 2016 at Tuticorin Research Centre of ICAR-CMFRI. Dr. Sugumar, Dean, Fisheries College and Research Institute, Thoothukudi inaugurated the workshop. Fifteen participants attended the three day workshop. The fourth workshop of the series was conducted during 27-29 January 2016 at Vizhinjam Research Centre. Dr. G. Gopakumar, Emeritus Scientist, inaugurated the workshop on 27th January. Fifteen participants attended the three day workshop. The fifth workshop was conducted during 14 -16 March 2016 at Karwar Research Centre of ICAR-CMFRI. Dr. Jayakar Bhandari, Head, Dept. of Botany, Government College Karwar inaugurated the workshop. Around 18 participants attended the three day workshop. The Sixth workshop



Participants at Tuticorin Research Centre

was conducted during 22-24 March 2016 at Visakhapatnam Regional Centre. Dr. G Syda Rao, Former Director of ICAR-CMFRI inaugurated the

workshop which was attended by 22 participants.

(Reported by: Dr. K. Vijayakumaran,
Course Coordinator)

Consultancy Programme on Artificial Reefs

Primary socioeconomic benchmark study hydrography and site selection works were conducted by the consultancy team for deployment and monitoring of artificial reefs in 12 coastal villages of Tamil Nadu (Koraikuppam &

Saathankuppam in Thiruvallur district; Karikattukuppam and Soolerikadu in Kancheepuram district; Goonimedukuppam & Mudaliarkuppam in Villupuram district; Thoduvai & Chavadikuppam in Nagapattinam district;

Periyakuppam & Ayyampettai in Cuddalore district and Kovalam and Pallam in Kanyakumari district), under the IFAD-PTSPL funded consultancy project.

(Reported by : Joe K. Kizhakudan, Madras
Research Centre)

Cage culture of cobia at Kovalam

The Participatory mode operations of the GI Cages (4 cages off Kovalam) farming of Cobia has commenced at Kovalam Field Lab, under the FIMSUL-II, Department of Fisheries Tamil Nadu on 31st March, 2016 with the transport of live fish seed from Regional Centre of ICAR-CMFRI, Mandapam.

Foundation stone laid

Dr. A. Gopalakrishnan, Director laid the Foundation Stone for Type III Staff Residential quarters at Mandapam Regional Centre on 24th February 2016



Eco friendly cloth bags and organic farming promoted



The Fishery Environment Management Division (FEMD) and NICRA unit of ICAR-CMFRI at HQ, jointly organized a hands on training programme for making eco-friendly cloth bags as an alternative for plastic carry bags. The programme was arranged in collaboration with Energy Management Centre, Kerala; Centre for Environment and Development, Kerala and Shakti, (Women's wing) of Swadeshi Science Congress, on 28th January, 2016, at Vyapari Bhavan Jubilee Hall, Edavanakkad. The programme aimed at reducing plastic accumulation in the environment by creating awareness among the public through self help groups of fisherwomen. The fisherwomen of Vypin belonging to 15 self help groups were trained for stitching, eco friendly cloth bags which are foldable, user friendly and appealing. The training also aimed at providing alternate employment to fisherwomen in situations of climate induced loss of fishing days. Dr.

V. Kripa, Head, FEM Division and Dr. P. Kaladharan, Principal Scientist, felicitated the awareness programme. The trainer, Mrs. Thaslim, Bhoomithram, Kaloor conducted the stitching workshop.

(Reported by: Fishery Environment Management Division)

Clean Campus activities were conducted regularly in the Mangalore Research Centre. A small vegetable patch was developed by recycling organic wastes where vegetables like snake gourd, ridge gourd, ladies finger, green chillies, gherkins and spinach are being cultivated.



Vegetable patch on the premises of Mangalore Research Centre

Mera Gaon Mera Gaurav programme

The Mera Gaon Mera Gaurav Scheme was initiated in ICAR-CMFRI in November, 2015. At Headquarters, a committee was formed for implementing the scheme which identified groups of 4 scientists. Each group was allotted 5 fishing villages within a distance of 50-100 km. Benchmark surveys were conducted for obtaining base-line information of the adopted villages and the main problems faced by

the village with regard to fishing as well as farming operations. The surveys covered 44 fishing villages in Kerala falling in Ernakulam, Thrissur, Alappuzha, Kozhikode and Kasargod districts. Apart from this, surveys conducted by various Research Centres of ICAR-CMFRI include 10 fishing villages in Tamil Nadu, 5 fishing villages in Karnataka, 10 fishing villages in Andhra Pradesh and 10 fishing villages in Gujarat.

The scientists of Madras Research Centre, Chennai conducted meetings with the fisheremen in 10 selected villages of Kanchipuram (19th and 29th January 2016), Thiruvallur (21st-22nd January, 2016) and Chennai (25th January) districts and collected details on impact of flood that occurred in Tamil Nadu during December 2015.

(Reported by: G. Maheshwarudu, Nodal Officer, MGMT programme and Madras Research Centre)

Trainings at Mandapam Regional Centre

Training Programme on 'Marine Sea Cage Farming' was conducted to the fishers and fisheries officials under FIMSUL-II project of State Fisheries Department, Tamil Nadu at the Regional Centre of ICAR-CMFRI, Mandapam, during 2-6, February, 2016. A total of 23 participants from Kanyakumari, Kancheepuram and Ramanathapuram districts attended the programme. Hands-on training on cage farming, feeding, cage and net fabrication, net exchange etc. Visit to hatchery facilities to understand broodstock development and seed production technologies of marine finfishes and ornamental fishes was arranged besides field visits to sea cage and seaweed farms nearby. The valedictory function was held on 6th February 2016.



Practical exposure on HDPE welding

Training programme was organized under Gulf of Mannar Biosphere Reserve Trust (GOMBRT) funded project on 'Seed Production of Selected Marine Ornamental Fishes' at Mandapam Regional Centre during 22nd to 24th March 2016. A total of 59 fishers from Muthupettai Bharathi Nagar, Mangaleshwari Nagar, Vivekanadapuram, Muthuraj Nagar, Mudiveeranpattinam villages in Gulf of Mannar region participated the training. Field visit to small scale marine ornamental fish unit at Mandapam and interaction with the marine ornamental fish buyers was arranged. Thematic Apperception Test was administered among the trainees to identify their level of achievement motivation and Training Effectiveness Index was worked out. Valedictory function was conducted on 24th March 2016 where Dr. T. S. Dange, I.F.S., Director, GOMBRT delivered the



Trainees at Marine Ornamental fish unit

valedictory address and distributed the certificates to the participants. Dr. B. Johnson, Scientist & Principal Investigator of the project proposed vote

of thanks.

(Reported by A. K. Abdul Nazar and B. Johnson, Mandapam Regional Centre)

DBT sponsored National Training Programme

The 2nd batch of the 'National Training Programme on 'Molecular Biology and Biotechnology for Fisheries Professionals', sponsored by Department of Bio-Technology (DBT) started on 2nd November 2015 and ended on 30th January, 2016. The participants were Dr. Babitha Rani and Mr. Damotharan K., Scientists, ICAR-Central Institute of Fisheries Education (CIFE), Mumbai, Mrs. N. Jesintha, Assistant Professor, College of Fishery Science, Muthukur, Andhra Pradesh and

Mr. P. Sayooj, Technical Assistant, ICAR-CMFRI.

A total of 78 lectures including 10 invited lectures and practical sessions were held. Interactions with reputed scientists and academicians from various institutions (ICAR-CIFE, ICAR-CIBA, ICAR-NBFGR, NIVEDI, NANSEN, NCAAH and ICAR-CMFRI) working on different aspects of molecular biology, bio-prospecting, disease diagnosis and nutrition were organized for the

trainees. 4 days (20th to 23rd January 2016) hands on training on invertebrate cell culture was arranged at the Madras Research Centre of ICAR-CMFRI for the participants. They also participants also visited hatchery and farms functioning under ICAR-CIBA at Muthukkad. Short projects on selected topics applying the various molecular techniques they learned during the training was also facilitated. Dr. Vidya Jayasankar, Dr. C. P. Suja and Dr. V. Srinivasa Raghavan participated as faculty.

Capacity Building Training Programmes

Hands on training on 'Marine Ornamental fish breeding and hatchery seed production' was held during 27th to 31st October, 2015 at CMFRI Headquarters. Eight farmers from various parts of India attended this training programme. Apart from theory classes, the trainees were given practical on fabrication of glass tanks and setting up of Marine aquarium, broodstock tank setting, broodstock selection and stocking, daily feeding and management of aquarium, breeding, egg and larval handling, stock and mass culture of microalgae and zooplankton (marine rotifer, copepod and cladocera), Artemia



Dr. A. Gopalakrishnan, Director releasing the training manual.

culture, live feed enrichment and harvesting, larval rearing to juveniles and subsequent sorting and packing for transportation. At the end of training program, the trainees were also supplied

with broodstocks of marine ornamental fishes and live feeds for initiating marine ornamental fish culture as a livelihood option and self employment.

(Reported by K. Madhu, Mariculture Division)

The one month capacity building training Programme funded by Society for Assistance to Fisherwomen (SAF) under the Department of Fisheries, Government of Kerala, for conducting the skill and on job training to educated unemployed young fisherwomen from fishermen community was conducted by the institute from 10th February - 13th March 2016. Dr. A. Gopalakrishnan, Director, inaugurated the programme. The first phase of the classroom learning for a month was followed by a Phase II -Experiential learning through *in-situ* training. 25 on job training centres for the placement training were identified considering the educational background of the trainees and their area of interest.

(Reported by Shyam Salim, Course Co-ordinator)

Thirteen staff of Department of Fisheries, Govt. of Kerala, attended the training programme organized during 11th to 16th January 2016 at Headquarters. The topic '*Conservation and Management of Fisheries Resources and Statistical Survey*' covered various topics including survey methods, Ecosystem approach to marine fisheries management and Responsible Fisheries.

(Reported by E. M. Abdussamad, Course co-ordinator)

Training on 'live feed culture' was organized at the Visakhapatnam Regional Centre from 17th - 22nd March, 2016. Sixteen trainees from different fish/shrimp hatcheries in and around Andhra Pradesh attended the programme. They were trained in the isolation and purification of marine algae, stock maintenance and mass culture of plankton used for larval rearing of finfishes and shell fishes, under the guidance of Dr. Shubhadeep Ghosh and Dr. Biji Xavier.

(Reported by : Vishakhapatnam Regional Centre)

A training programme on cage culture technology was organized for Co-PIs of the participating centres under the AINP at the Karwar Research Centre of ICAR-CMFRI during 8th to 12th February, 2016.

(Reported by : Karwar Research Centre)

Training in Oyster farming

Training in oyster (*Crassostrea madrasensis*, *Saccostrea cucullata*) farming by Rack & Ren method was imparted to two fisherwomen groups in Dakshina Kannada District. For the first time in Karnataka, these oyster farmers had benefitted from Rashtriya Krishi Vikas Yojana (RKVY) Scheme of Govt. of Karnataka. During the training, racks were fabricated using bamboo poles in estuarine areas of rivers Sambhavi and Pavanje and spat collectors of oyster cultch material were suspended.

(Reported by Geetha Sasikumar, Prathibha Rohit and G.D. Nataraja, Mangalore Research Centre)



Fish Ageing Training Program

A training programme 'Basics of fish ageing using hard parts for stock assessment' was conducted for scientific and technical staff of Indian Council of Agricultural Research (ICAR), at Kochi during 14th-18th March 2016. Scientists and Technical staff from ICAR-CMFRI, ICAR-NBFGR, ICAR-CIFE and ICAR-CARI attended the programme. Hands-on training on sample collection, otolith extraction and processing, age reading using rings and validation and application of age data in stock assessment were taught.

(Reported by E. M. Abdussamad, Course co-ordinator)



Training in otolith extraction

Visitors to ATIC

Several fishermen and other stakeholders visited the Agricultural Technology Information Centre (ATIC) at ICAR-CMFRI during the period. Officials for the State Fisheries Department from Kerala, Karnataka, Goa, UT Anadaman & Nicobar, UT Lakshadweep, Odisha and Maharashtra officials from the Department of Fisheries in Bangladesh and fish farmers visited ATIC during the period. Trainees from NIPHATT, ICAR-CIFT, ICAR-NBFGR, fisheries colleges; faculty, researchers, and students from colleges in various parts of the country visited the institute as part of Study Tour, Industrial Visit and Walk with the Scholar Programme. During the year 2015 there has been a five fold increase



Students interacting with Dr. Trevor Platt, Visiting Professor from PML, Plymouth, UK

in visitors to ATIC where the technologies developed by the institute are

showcased. Visitors were made aware of the latest information on research activities and technological know-how by facilitating visits to the various laboratories, biodiversity museum, aquarium, and technology museum. Movie shows and publications prepared by the institute also helped them to get the additional details regarding the institute.



Scientist-Students interactive session

A training programme on 'Fisheries resource management' was organised for the final year BFSc students of College of fisheries, Kamadhenu Viswavidyalaya, Chattisgarh from February 17th to 19th, 2016 at ICAR-CMFRI, Kochi. ATIC also co-ordinated a stakeholders' meeting of Chairmen of Fishermen Cooperative



Training programme for B.FSc students from Chhatisgarh



Scientists interacting with fishermen society executive members from Maharashtra

Societies of Maharashtra (Maharashtra Rajya Machmar Sahakari Sangh) with the Heads of Divisions in ICAR-CMFRI and

ICAR-CIFRI on March 1st, 2016. The fishermen interacted with the experts on available practical solutions for various

issues such as decline of marine fish catches, coastal pollution and database on inland fish production.

Revenue generation

The total annual revenue generated for the financial year 2015-16 was ₹ 3.52 lakhs from the visitors fee (₹ 1.19 lakh) and sale of products and services (₹ 2.33 lakhs). 742 fishermen, fish farmers and others benefited through the various products and services of ICAR-CMFRI.

(Prepared by : N. Aswathy, ATIC)

Republic day celebrations

The institute celebrated Republic Day on 26th January, 2016 at Headquarters and various Regional / Research Centres. Dr. A. Gopalakrishnan, Director ICAR-CMFRI hoisted the National flag at KVK campus. In his speech, he suggested to take part in the Union government's Pulses Development Programme by popularizing cultivation of pulses in the district.



Dr. A. Gopalakrishnan Director at Republic Day function at KVK

Best Paper Award

Dr. Grinson George won the Best Paper Award for his presentation "Numerical modeling and satellite remote sensing as a surrogate for identifying biomass for marine aquatic organisms of MBBSL 2016 Symposium track III (Sustainable Livelihood) conducted by UGC and Cochin University of Science & Technology.

ICAR-CMFRI Participated in the *Krishi Unnathi Mela* held at IARI, Pusa, New Delhi from 19th-21st March, 2016.



Dr. Trilochan Mohapatra, DG, ICAR and Dr. J. K. Jena DDG (Fisheries), ICAR in the CMFRI stall at Krishi Unnathi Mela

Agricultural Technology Information Centre (ATIC), participated in following exhibitions:

- NEST-2016 'Nurturing and Exploring Student's talent "NEST-2016" at Al Huda Public school, Panayikulam, Aluva on 18th-19th January, 2016.
- Exhibition 'SCIENTIA-16' at M.E.S. Asmabi College, Kodungallur, Thrissur from 21st-26th January 2016.
- Kisan Mela and Exhibition in connection with the centenary celebrations of ICAR-CPCRI, Kasargod on 12th March, 2016.

Veraval Regional Centre participated in the exhibition *Sagar Khedu* on 25th January 2016 at Veraval. Smt. Anandibhen Patel, Chief Minister of Gujarat and Shri Bhabubhai Bukiria, Minister for Agriculture visited the stall along with the Secretary (Fisheries) and

Commissioner of Fisheries, Gujarat. They interacted with the officials of ICAR-CMFRI and staff on possibilities of sea cage farming along Gujarat coast.

Mangalore Research Centre of ICAR-CMFRI participated in the *Matsya Mela* celebrations organised by the College of Fisheries, Yekkuru, Mangaluru at TMA Pai Convention Centre, Mangaluru from 4th- 6th March 2016.

Tuticorin Research Centre of ICAR-CMFRI participated in one day Science Exhibition held on 23rd January 2016, conducted in Geetha Matriculation Higher Secondary school, Thoothukudi.

Karwar Research Centre participated in the Aqua Goa, Mega Fish Festival from 8th to 10th January, 2016. Smt. Sonali S. M., Senior Technical Assistant also delivered a talk on 'brackish water cage farming' during the festival.



Smt. Anandibhen Patel, Chief Minister of Gujarat visiting the ICAR- CMFRI stall

ICAR Inter-Zonal Sports Tournament

The team from ICAR-CMFRI won in the following events at the ICAR Inter-Zonal Sports Tournament held at ICAR-CAZRI, Jodhpur, Rajasthan.

- Javelin Throw (Men): Shri. A.K. Shaji III Prize
- Badminton (Mens) : Shri. A. K. Shaji, Shri. C. Jayakanthan, Shri. V. Rajendran and Shri. Jestin Joy. (Runners up).

Journal Club

Arranged following Lectures in which scientists, technical staff and researchers participated

- Dr. Anu Kumar, Chief Scientist, CSIRO, Adelaide, Australia on 'Eco- Toxicology' 5th January 2016 at ICAR-CMFRI, Kochi.
- Dr. Johan H Williams, Specialist Director, Ministry of Fisheries and Coastal Affairs, Oslo, Norway talked on 'Norwegian Fisheries Management' on 16th January, 2016.
- Dr. Neel Aluru, Scientist, Biology Department, Woods Hole Oceanographic Institution, Massachusetts, delivered a talk on 'Oceans and Human Health: A Climate Change Perspective' on 30th January, 2016.
- Dr. R. Jeyabaskaran, Senior Scientist, Fishery Environment Management Division, ICAR-CMFRI delivered a talk on the topic 'Enigmatic Mass Stranding of Short-finned Pilot whale at Manapad, Southeast coast of India' on 18th March, 2016.
- Dr. V. Kripa, Head, FEMD, ICAR-CMFRI delivered a talk on the topic "Where have our sardines gone and why they are so dear to us now" on 23rd March, 2016.

(Reported by Shyam S. Salim, Journal Club)

Parliamentary Committee inspection

The Second Sub-Committee of the Committee of Parliament on Official Language inspected the Official Language implementation activities of Veraval Regional Centre of ICAR-CMFRI on 19th January, 2016. The inspection meeting was chaired by Dr. Sunil Baliram Gaikwad, Member of Parliament. Other members included Dr. Mahendra Nath Pandey, Member of Parliament, Ms. Abhilasha Mishra, Hindi Officer and Shri Nikhil Arora, Senior Translator of the Committee Secretariat. Dr. Pravin Puthra, Assistant Director General (Marine Fisheries), Smt. Seema Chopra, Deputy Director (OL) and Shri Manoj Kumar, ACTO (Hindi) from ICAR were present. Representatives of the institute at the meeting included Dr. P. Vijayagopal, Principal Scientist, Shri C. Muralidharan, Chief Administrative Officer, Smt. E. K.



Visiting Parliamentary Committee at Veraval Regional Centre

Uma, ACTO (Hindi), Shri K. Mohammed Koya, Scientist-in-Charge, Veraval Regional Centre and Shri Chandra Mauli Sharma, Asst. Administrative Officer. During the meeting, the Committee

appreciated the efforts taken by the Institute on Official Language promotion activities as well as the research activities especially open sea cage fish farming being carried out by the institute.

National Scientific Hindi Seminar

To propagate use of Hindi in the field of research and disseminate the research findings in Hindi, a one day National Scientific Hindi seminar on 'Mariculture' was organized at ICAR-CMFRI Headquarters, Kochi on March 9th 2016. Scientists from the various Regional and Research Centers and other Fisheries Institutes participated in the seminar. A total of 25 articles were presented in Hindi or displayed as Hindi Posters.

Shri. Abhay Kumar Singh, Commissioner of Income Tax (Appeal), Kochi was the Chief Guest. Dr. R. Narayanakumar, presided over the inaugural session. Smt. Bindu P.V., Deputy Director (Implementation), Department of Official Language, Ministry of Home Affairs, New Delhi; Smt. E. K. Uma,



Release of ICAR CMFRI Special Publication (Hindi) Samudri Samvardhan by Chief Guest Shri Abhay Kumar

ACTO (Hindi) and Dr. Imelda Joseph, Head-in-Charge, Mariculture Division, ICAR-CMFRI also spoke on the occasion.

Dr. Gulshad Mohammed, Dr. V. P.

Vipinkumar and Dr. Shyam S. Salim, bagged prizes for Best Paper presentation. Dr. Imelda Joseph, Dr. Josileen Jose and Dr. Vidya Jayasankar, bagged the Best Poster prizes.

Official Language inspections

Shri C. Muralidharan, Chief Administrative Officer inspected the Official Language activities of

Visakhapatnam Regional Centre on 6th January, 2016, Karwar Research Centre on 8th February, 2016 and Mangalore

Research Centre on 10th February, 2016.

OLIC Meetings

The quarterly meeting of Official Language Implementation Committee at Headquarters was held on 7th January 2016 under the Chairmanship

of Dr. A. Gopalakrishnan, Director. Official Language activities for the quarter October- December, 2015 were reviewed and decisions were taken for

further improvement. Quarterly meeting at Mumbai RC was held on 2nd January, 2016.

Dr. Johán H Williams, Norway visits ICAR-CMFRI



Dr. Johán H Williams with Director and Heads of Divisions of ICAR-CMFRI

Dr. Johán H Williams, Specialist Director, Norwegian Ministry of Trade, Industry and Fisheries and the President, North East Atlantic Fisheries Commission visited the institute on 16th January 2016. He was welcomed by Dr A. Gopalakrishnan, Director, and Heads of Divisions (HoDs) of ICAR-CMFRI. This was followed by a meeting where possible areas of joint research activities between ICAR-CMFRI and Norwegian agencies such as Institute of Marine

Research, Norwegian Veterinary Institute etc., were discussed. The visit of Dr. Johan Williams and team to the Indo-Norwegian Project (INP) sites in Kerala, implemented during 1960s was also facilitated.

As a part of the agenda of the 4th Indo-Norwegian Working Group on Co-operation in Fisheries and Aquaculture Dr. Williams also gave a talk on 'Norwegian Fisheries Management: A fine Balance'. 131 Scientists and

researchers from Central Marine Fisheries Research Institute (ICAR-CMFRI), Peninsular and Marine Fish Genetic Resources (PMFGR) Centre of the National Bureau of Fish Genetic Resources (ICAR-NBFGR), Central Institute of Fisheries Technology (ICAR-CIFT), Kochi Centre of Central Inland Fisheries Research Institute (ICAR-CIFRI) and Marine Sciences Department of Cochin University of Science and Technology (CUSAT) attended.

- World Bank team inspected the ongoing FIMSUL-II programmes- open sea cage farming, under ICAR-CMFRI consultancy at Kovalam Field Lab. The officials included Shri. Martin S. Kumar and Dr. B. N. Krishnamurti, (World Bank); Shri. Mohanasundaram, Additional Director (Fisheries), Shri. Jude Armstrong and Shri. Julius Edward from the Fisheries Department.

World Bank team interacting with open sea cage farming fishermen groups



Visitors to Mumbai Research Centre of ICAR-CMFRI

- Dr. S. D. Singh, Former ADG, (Inland Fisheries), ICAR, New Delhi on 8th January, 2016
- Dr. Asfa Yasin, Professor & Head, Centre for International Relations, PSSCIUE, NCERT, Bhopal on 13th January, 2016.
- Mr. David S. Boxer, Environment, Climate & Science Unit Chief, US Embassy, New Delhi and Ms. Priya Ghose, Environment Specialist on 11th February 2016.
- Mr. Chhabilendra Roul, IAS, Additional Secretary (DARE) & Secretary, ICAR, New Delhi on 5th March, 2016.

Eye and dental camp at Chennai

The Recreation Club of the Madras Research Centre organized an eye and dental camp at the Centre on 8 January 2016. The camp was conducted by Vasan Dental and Eye Care Hospital Pvt. Ltd., and was attended by 78 staff members from both ICAR-CMFRI and ICAR-CIBA. Members also donated old and new clothes to flood affected people of Chennai through Kaakkum Karanagal group of orphanages.

Women's Day celebration

International Women's Day was celebrated at the Madras Research Centre on 5th March 2016. A talk by Dr. Joice Tilagam, (Retired Medical Officer, Corporation of Chennai) on the topic "Role of women in the family, workplace and society" was organized as a part of this event.

Director Visits Mandapam Regional Centre

- Dr.A.Gopalakrishnan, Director, inspected the facilities at Marine Reef Aquarium, RAS, and hatchery at

Mandapam Regional Centre of ICAR-CMFRI on 23rd February 2016.



Club Day Celebrated



Club day Celebrations of Mangalore RC

Club Day was celebrated at Mangalore Research Centre with a variety of dance programmes, light music concerts and games for the staff members and their children on 26th January, 2016.

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ICAR-KVK demonstrates Farm Gate markets for Pokkali fish

With a view to popularize nutritionally rich and naturally organic Pokkali fish ensuring enhanced income for farmers, KVK demonstrated 'Farm Gate markets' at 4 locations in Kadamakkudy on 26th March 2016. The programme was inaugurated by Kadamakkudy Grama Panchayath president Smt. Shalini Babu and Dr. A. Gopalakrishnan Director, ICAR- CMFRI. Live fishes were sold at premium price



Dr.A.Gopalakrishnan, Director inaugurating Pokkali fish sale on behalf of farmers

directly to customers avoiding middlemen and thus helped the farmers

to earn more profit. About 2000 people visited the Farm Gate markets.

Demonstration of GIFT Tilapia Farming



Shri. Shaju V. Thekkekkara, Karukutty Panchayat President inaugurating the harvest mela

Farming of GIFT Tilapia in small scale cages was demonstrated in a granite quarry at Karukutty, Angamaly by obtaining due license from Department of Fisheries. During the course of this demonstration, KVK conducted related on-farm awareness programmes to students, youth and farmers. A harvest mela was conducted on 23rd March 2016 to popularize the technology which was inaugurated by the Karukutty Panchayat President, Shri. Shaju V. Thekkekkara. The fish had reached 350 g weight in 6 months with a survival rate of 80%.

Products for organic farming launched

Shri. S. Sharma, MLA launched KVK's product-Nutrislurry on 5th December, 2015 at Pallippuram, Ernakulam. Nutrislurry an organic tonic that can regain soil health by developing beneficial microflora and organic matter content is a fermented mixture of desi cowdung, neem cake and ground nut cake in certain proportions in convenience packing of 5 litres. The contents diluted in 5 litre water can be applied to plants. The product is available for sale at CMFRI ATIC/KVK sales counter.

Other organic products like Vermicompost, Enriched Cowdung and Desi Gomutra recommended for basal and foliar application; Bio-pesticides (Nanma, Menma, Sakthi and Shreya) were launched by Director, Dr. A.



Shri. S. Sharma MLA launching Nutri Slurry our organic soil rejuvenating tonic

Gopalakrishnan during a function held at ICAR-CMFRI, Kochi on 10th March 2016. To make available Quality Agricultural

Inputs for the Organic farmers of the district. M/s Jeeva Kudumbashree Micro Enterprise - an all women joint liability



Dr. A. Gopalakrishnan, Director, releasing the new products of KVK

group (JLG) of Kudumbashree produces and sells products like Neem cake, Castor cake, Vermicompost, Sprayable Neem



JKME visiting card

Oil, Dolomite, Grow bags, Grow bag mixture, etc with technology backstopping from KVK. This business entity has started

functioning in Airapuram Village of Mazhuvannur Grama Panchayath on 23rd February 2016.

Pre-rabi awareness campaign conducted

A Pre-Rabi awareness campaign was conducted in association with Ernakulam Agri Horticultural Society during 2nd to 10th January, 2016 at Ernakulam. Pre-rabi awareness programmes were conducted by all KVK's across the country during this period as per the direction from Ministry of Agriculture. The relevant technologies in Agriculture and allied sector for Ernakulam district were popularized through posters, booklets and display of KVK products. Around 35,000 farmers and 450 extension personnel visited the KVK stall during this one week long programme.



National recognition for innovative farmer

Shri. Sachidanandan Velliyath, a 65 year old farmer from North Aduvassery, Ernakulam district won the prestigious Innovative Farmer award of Indian Council of Agricultural Research (ICAR). He received the award from Hon'ble Union Minister for Agriculture Shri. Radha Mohan Singh at the *Krishi Unnati Mela* held on 21st March 2016 at New Delhi. Development of a Nutmeg decorticator, a device to de-shell the nutmeg seeds made him eligible for the award.



Shri. Sachidanandan receiving the best farmer innovator award 2015-16

Field Experience Training of 21 days duration from 8th to 28th February, 2016 at Nayarambalam village was conducted for Scientists (probationers) of Indian Council of Agricultural Research at KVK as part

of their Foundation Course for Agricultural Research Service (FOCARS) at National Academy of Agricultural Research Management (NAARM), Hyderabad. Their findings were explained to the villagers during a function

held on 22nd February, 2016. Nayarambalam Panchayat President, Shri. E.P. Shibu inaugurated the programme. Panchayat members, line department officials and KVK officials were present.

- **Dr. A. Gopalakrishnan**, Director
Attended second meeting of the committee constituted to suggest Draft National Policy on Marine Fisheries under the chairmanship of Director-General, ICAR on 21st January 2016.

Attended the Annual Conference of Vice-Chancellors of Agricultural Universities and Directors of ICAR Institutes from 22nd to 24th January 2016.

Attended the meeting of the Directors of all Fisheries Research Institutes convened by Deputy Director General (Fy), ICAR on 25th January 2016.

Attended the inaugural function of International Research and Training Centre for Below Sea Level Farming at Mankombu in Kuttanad on 6th February 2016.

Attended the Stakeholders' meeting in connection with National Marine Fisheries Policy 2016 at Visakhapatnam on 11th February 2016.

Attended the National Marine Fisheries Policy meeting at Krishi Bhavan, New Delhi on 26th & 27th February 2016.

Attended the meeting of the Hon'ble Union Agriculture and Farmers Welfare Minister with the representatives of fishermen from Kerala at Krishi Bhavan, New Delhi on 2nd March 2016.

Attended the meeting of the Hon'ble Minister for Agriculture and Farmers Welfare with the representatives from Fisheries Departments of Coastal States/UTs and Fisheries Institutes/Organizations to discuss on the modalities for promotion of traditional fishers for deep-sea fishing operations at Krishi Bhavan, New Delhi on 9th March 2016.

- **Dr. K.S. Mohamed**, Head, MFD attended International Conference "Towards a sustainable blue economy: Production, strategies and policies-TaSBE

2016" organised by KUFOS & NERCI and delivered an invited talk on Ecosystem based Fisheries Management on 6th February, 2016 at Kochi.

Attended Conference on 'National Marine Fisheries Policy -2016' conducted by Kerala Swathanthara Matsya Thozhilali Union on 14th January 2016 at Thoppumpady, Kochi.

Attended meetings of the Committee constituted to discuss the 'Draft National Marine Fisheries Policy' on 21st January, 2016 and 26th-27th February, 2016 at New Delhi

Stakeholders Meeting to discuss National Marine Fisheries Policy on 9th February, 2016 at Madras Research Centre and 11th February, 2016 at Visakhapatnam Regional Centre of ICAR-CMFRI.

Meeting with the Hon'ble Union Minister for Agriculture and Farmers' Welfare with the representatives of fishermen from Kerala on 2nd March, 2016 at New Delhi.

Meeting with the Hon'ble Union Minister for Agriculture and Farmers Welfare and the representatives from Fisheries Department of coastal states/UT/ Fisheries Institutes/ Organizations on 9th March, 2016 at New Delhi.

- **Dr. V. Kripa**, Head, FEMD attended the National Consultation Meet on Mariculture, Utilization and Value addition of Seaweeds for the Livelihood Security of Coastal population, organized by ICAR-CMFRI & DBT on 18th February, 2016 at Kochi.

Attended the 79th meeting of Institute Management Committee held at ICAR-CMFRI, Kochi on 29th February, 2016

Attended the Institute Management Committee meeting of ICAR-CIFT held on 10th March, 2016.

- **Dr. P.U. Zacharia**, Head, DFD

participated the Stakeholder consultation meet in connection with National Marine Fisheries Policy 2016 at Mumbai RC on 25th January 2016 and Chennai Research Centre on 9th February 2016.

Attended the international seminar 'Towards a Sustainable Blue Economy: Production, Strategies - TaSBE- 2016' organised by Kerala University of Fisheries and Ocean Sciences and gave an invited talk on 'Impact, adaptation and mitigation option for Indian marine fisheries to climate change' on 5th February 2016 at Radisson Blue Hotel, Kochi.

Attended the National Workshop on Technology Development and Application for Climate Change and gave a talk on 'Impact of Climate Change on Marine Fisheries' on 15th March 2016 at CSIR-NIO Regional Centre, Kochi.

- **Dr. P. Laxmilatha**, SIC, Madras Research Centre, attended the XXIII meeting of the Consultative Group of Chennai Base of Fishery Survey of India (FSI) on 6th January 2016 at Chennai.

Attended the 2nd State Level Technical Committee meeting (SLTC) of FIMSUL II Project held at the Commissionerate of Fisheries, Chennai on 6th January, 2016.

Attended the one day workshop on 'Integrated Coastal Zone Management in Tamil Nadu' held at Anna University, Chennai on 12th January 2016.

Participated in the Indo-French Workshop: 'Exploring the scope of collaborations in Marine Biology and Biotechnology between France and India', from 7th-9th March 2016 at IISc, Bengaluru.

Attended the Southern Regional Consultation (SRC) jointly organized by the Forum for Indian Development Cooperation, New Delhi. The Bay of Bengal Programme, Chennai and Madras

Institute of Developmental Studies, Chennai on 15th March 2016 at Chennai.

- **Dr. G. Maheswarudu**, Head, CFD functioned as Liaison Officer (Nodal Point-ICAR CMFRI) with the study visit of Parliamentary committee on Agriculture to Kochi during 18th - 19th January, 2016.

- **Dr. Veerendra Veer Singh**, SIC, Mumbai RC, Chaired the 18th Six Monthly Meeting with Regional Heads of Offices of Hindi Rajbhasha Samiti (TOLIC) Mumbai (NORTH) on 24th February, 2016.

Attended 30th Meeting of National Coastal Zone Management Authority (NCZMA) on 29th February, 2016 at Ministry of Environment, Forests and Climate Change, New Delhi.

Attended as an invited expert in the meeting of QP-NOS (Qualification Packs and National Occupational Standards) to discuss the occupational map and content of job roles for fisheries sector organised by Agriculture Skill Council of India, Gurugram on 13th January 2016 at ICAR-Central Institute of Fisheries Education.

Attended Aquarium Renovation Meeting on 05th March, 2016 at Taraporevala Aquarium, Office of the Commissioner of Fisheries, Govt. of Maharashtra in Mumbai.

- **Dr. Prathibha Rohit**, SIC, Mangalore Research Centre, attended the meeting of the Working Group constituted for monitoring and review of implementation of IOTC resolutions at Krishi Bhavan, New Delhi on 8th January, 2016.

Attended the meeting of stakeholders from Kerala and Karnataka to elicit responses for the draft policy document on National Marine Fisheries Policy conducted at CIFNET, Kochi from 3rd - 4th February, 2016.

Participated as an Expert Committee member to screen projects relating to marine ecosystem at Aranya Bhavan, Malleshwaram, Bengaluru on 26th February, 2016.

Participated in the tuna tagging programme under SATTUNA project at Lakshadweep Islands from 14th - 16th March, 2016.

- **Dr. A. P. Dineshbabu** and **Dr. Sujitha Thomas** (Principal Scientists) participated in the mid-term review meeting on Sustained Indian Ocean Biogeochemistry and Ecosystem Research (SIBER-INDIA) programme, convened by CSIR-National Institute of Oceanography, Dona Paula, Goa from 17th - 18th February, 2016.

- **Dr. P. S. Swathi Lekshmi**, Principal Scientist attended the Centenary Celebrations of ICAR-CPCRI at Kasargod, Kerala on 12th March, 2016 and organized the exhibition stall of CMFRI on the occasion.

Attended the Technical Committee meeting at the College of Fisheries, Mangaluru on 21st March, 2016.

- **Dr. P. Laxmilatha**, **Dr. A. Margaret Muthu Rathinam**, **Dr. Joe K. Kizhakudan**, (Principal Scientists), **Dr. Vidya Jayasankar**, Senior Scientist, **Mrs. Hema Sankari**, **Dr. R. Geetha**, **Ms. Indira Divipala** and **Ms. E. M. Chhandaprajnadarsini**, Scientists attended the National Workshop on Marketing Strategies for newly cultured fishes in India, organized by The Fisheries Technocrats Forum (FTF) and ICAR-CIBA, Chennai on 16th March, 2016.

- **Dr. A. K. Abdul Nazar**, SIC, Mandapam Regional Centre and **Dr. B. Johnson**, Scientist participated in the DBT-CMFRI National Consultation Meet on Mariculture, Utilization and Value

addition of Seaweeds for livelihood security of Coastal Population held at CMFRI, Kochi on 18th February, 2016.

- **Dr. A.K. Abdul Nazar**, delivered a talk in the technical session of National Workshop on 'Marketing Strategies for Newly Cultured Fishes in India' organized by The Fisheries Technocrats Forum, Chennai on 16th March 2016.

- **Dr. B. Johnson**, Scientist, participated as resource person in the 'Knowledge Fair' programme organized by Reliance Foundation on 25th January 2016 at KVK, Ramanathapuram.

Participated as resource person and delivered lecture in the training programme on 'Seaweed culture and its allied industry' organized by the University Business Collaboration Centre, Alagappa University, Karaikudi on 26th February 2016.

- **Dr. R. Saravanan**, Scientist, delivered a lecture to 61st batch trainees of IFS on 7th January 2016 at ICAR-CMFRI, Mandapam

Participated as resource person and delivered a lecture in National Seminar on 'Marine Bioresources: Prospects and Threats' at Saint Mary's College, Thoothukudi on 11th February 2016.

- **Ms. L. Remya**, Scientist participated the National Seminar on 'Marine Biodiversity and Bioprospecting for Sustainable Livelihood' organized by University Grants Commission, New Delhi & Cochin University of Science and Technology, Kochi on 21st and 22nd March, 2016 at CUSAT, Kochi.

- **Dr. G. Maheswarudu**, **Dr. S. Lakshmi Pillai**, (Principal Scientists) and **Dr. Rekhadevi Chakraborty**, Senior Scientist, attended the stakeholders' meeting on NMFP on 2nd February, 2016 at CIFNET, Kochi.

- **Dr. P. Kaladharan**, Principal Scientist attended the National Consultation on 'Pharmaceuticals and Bio-fuel from Marine Biological Systems - Status, Constraints and the Way Forward' organized by the National Centre for Aquatic Animal Health, Cochin University of Science and Technology, Kochi held during 1st - 3rd February, 2016.

Attended the national Seminar on Aquatic Resources - Threats and Perspectives NSARTP-2016 on 8th February, 2016 at Nagercoil.

Attended a demonstration workshop of the GOM-GIZ-CMP and made presentation on protecting mangroves from Plastics at Sawant Krishi Vidhya Peet, Dhabole, Ratnagiri on 5th March, 2016

Attended the Malabar Mussel Farmers Meet at Chervattur on 22nd March, 2016.

Attended the National Seminar in Hindi ICAR-CMFRI, Kochi on 9th March, 2016

- **Dr. R. Jeyabaskaran**, Senior Scientist delivered a talk on 'Marine mammals of India and contiguous seas' in the National Workshop on 'Cetacean Monitoring and Research Methods' organized by the Chief Conservator of Forests, Mangrove Cell & Nodal Officer, UNDP Sindhudurg Project, Maharashtra held at Mumbai & Malvan from 25th February - 3rd March, 2016.

Participated as Resource person and delivered a talk on 'Dugong Rescue and Rehabilitation' in the workshop on 'Dugong Conservation' organized by Wildlife wing of Dept. of Environment & Forests, Tamil Nadu held at Ramanathapuram, Tamil Nadu on 22nd March 2016.

- **Dr. Joe K. Kizhakudan**, Principal Scientist represented the institute at the Capacity Building Conclave held at NFDB, Hyderabad during 25th - 26th February 2016.

Conducted and chaired Fishermen-Farmer-Scientist meet in Kovalam on 2nd March 2016.

Participated in the 'The Blue Economy Challenge' launch by the Australian High Commissioner designate to India on 7th March 2016 at Hyatt Regency, Chennai.

Attended meeting with officials of the British Gas (BG) Energy Holdings Limited, UK in connection with the consultancy project on 'Oil and platform decommissioning and utilization as Artificial Reef in coastal waters in the NW coast of India', on 8th March 2016 at the Mumbai RC of ICAR-CMFRI.

Attended meeting with the Director Fisheries, Puducherry on 12th March 2016 on the consultancy project proposal on artificial reef installations along the Puducherry and Karaikkal coast.

- **Dr. P. P. Manojkumar, Dr. P. S. Asha**, Principal Scientists, attended the 62nd District Coastal Zone Management Authority meeting on 26th February, 2016 at District Collectorate, Thoothukudi.
- **Dr. P. P. Manojkumar**, SIC, Tuticorin RC, **Mr. L. Ranjith**, Scientist **Mr. N. Jesuraj**, Technical Officer, **Mr. S. Sekar V. Rayer**, Senior Technical Assistant - organized stakeholders meeting on mariculture at Sippikulam on 16th March, 2016.
- **Dr. P. P. Manojkumar**, SIC, Tuticorin RC, **Mr. L. Ranjith**, Scientist. **Mr. K. P. Kanthan**, Technical Assistant - organized Non-mechanized Fishermen Stakeholders Meeting at Arockiapuram, Kanyakumari District on 20th March, 2016.
- **Dr. Shyam S. Salim** attended the Review meeting cum Expert Consultation on Assessment of Extent of Dependence of Coastal Community on ESAs - A step towards demarcation of CVCA's at National Centre for Sustainable Coastal Management (NCSCM), Chennai, during

16th - 17th February 2016

Attended the Final Report Presentation of a project funded by the Ministry of Statistics and Programme Implementation (MoSPI), Government of India, New Delhi on 12th February 2016.

Delivered talk on the topic 'International trade agreements and fisheries sector: Lessons from India' to the officials of the Agriculture and allied departments and the scientists at SAMETI, Thiruvananthapuram.

Participated in the meeting of the Parliament Standing Committee on Agriculture held on 20th January, 2016 at Le Meridien Hotel, Kochi

- **Dr. Ritesh Ranjan**, attended the Annual Review meeting of the NBSFARA project 'Stock characterization, captive breeding, seed production and culture of hilsa (*Tenualosa ilisha*)' project at NASC, New Delhi on 11th February, 2016.
- **Mrs. E. K. Uma**, Assistant Chief Technical Officer (Hindi Translator) and **Mrs. Vandana V.**, Technical Assistant (Hindi Translator) attended one day Regional Official Language Conference conducted by Department of Official Language, Ministry of Home Affairs, New Delhi on 19th February, 2016 at International Hotel, Kochi.
- **Ms. Saloni Shivam**, Scientist and **Mr. N. G. Vaidya**, Technical Officer participated in the 42nd half-yearly meeting of TOLIC, Karwar on 18th March, 2016.
- **Mr. K. Jerald Raja**, UDC & **Mrs. R. Anantharani**, LDC attended the Hindi TOLIC workshop at Heavy Water Plant, Thoothukudi on 18th and 19th February, 2016.
- **Dr. C. P. Suja**, Senior Scientist attended the Hindi scientific seminar at Heavy Water Plant, Thoothukudi on 3rd March, 2016.

Workshop/Training/Conference etc.	Date and Venue	Participants
Training programme on "Regional Ocean Governance Framework, Implementation of the United Nations Convention on the Laws of the Sea (UNCLOS) and its related Instruments in the Southeast Asian & the Indian Ocean"	28 th February - 19 th March 2016, International Ocean Institute (IOI), Phuket, Thailand	Mr. K. Mohammed Koya, Scientist
'General Management Programme for Women Scientists'	25 th January to 5 th February, 2016, ASCI, Hyderabad.	Dr. Josileen Jose, Principal Scientist
Capacity Building Programme of Marine Stewardship Council	7-11 th March, 2016, Kochi	Dr. Josileen Jose, Dr. Geetha Sasikumar (Principal Scientists)
Symposium on Genomics in aquaculture	28 th - 30 th January 2016, ICAR-CIFA, Bhubaneswar	Mr. M. Sankar, Scientist Dr. M. P. Paulton, Senior Technical Officer
Hands on training in advanced instruments of water quality testing	11 th - 15 th January 2016, NIH, Roorkee	Ms. Lavanya. S, Technical Assistant
Auto CAD, Revit Architecture and structural analysis and design (STAAD)	CADD Centre, Ramanathapuram	Mr. Mendonza Xavier Senior Technical Officer
In house trainings/workshops	Date and Venue	Participants
Basics of Fish ageing using hard parts for stock assessment	2 nd - 5 th February 2016, ICAR-CMFRI, Kochi	Dr. K. M. Rajesh (Senior Scientist), Ms. Remya L., Mrs. Surya, Scientist
NICRA Workshop	8 th - 11 th March, 2016, Mangalore Research Centre of ICAR-CMFRI	Dr. P. U. Zacharia, Dr. Prathibha Rohit, Dr. A. P. Dineshbabu, Dr. Sujitha Thomas, Dr. K. M. Rajesh, Dr. M. Sivadas, Dr. Shubhadeep Ghosh, Dr. K. V. Akhilesh, Dr. Gyanranjan Dash, Mr. K. Mohammed Koya, Dr. J. K. Sobha, Dr. U. Ganga, Dr. T. M. Najmudeen, Ms. Indira Divipala
Workshop on, "Interactive Co-learning Workshop on Philosophy Methods and Ethics in Science"	27 th -29 th January 2016, Vizhinjam Research Centre 19 th to 21 st January 2016, Tuticorin Research Centre	Dr. R. Vidya, Scientist Dr. R. Saravanan, Dr. Amir Kumar Samal, Dr. N. S. Jeena, Mr. S. Chandrasekar, Ms. S. Surya, Ms. Ramya Abhijith and Ms. L. Remya (Scientists)
Use of GeoMedia software for marine fisheries analysis	21 st -22 nd January 2016 Visakhapatnam Regional Centre of ICAR-CMFRI	Dr. Shubhadeep Ghosh (Senior Scientist), Mrs. Muktha M. and Mr. Rajendra Naik (Scientists)
Workshop on Use of Hindi as Official Language	9 th March, 2016, Visakhapatnam Regional Centre	All staff of Centre

HRD Cell at Headquarters organized the following programs

- "Orientation Training Programme" for newly recruited Skilled Support Staff of Headquarters (on 22nd February, 2016) and Regional Research Centres (on 23rd February, 2016).
- Training Programme for staff on "Stress Management and Time Management Building" on 17th March, 2016 and 'Positive Attitude and Team Building' on 20th January 2016 conducted by Central Board for Worker Education (CBWE), Ministry of Labour, Govt. of India.

APPOINTMENTS			
Name	Designation	Centre	w.e.f
Mr. Ravichandra Angadi	Skilled Support Staff	Karwar Research Centre	24.09.2015
Mr. P. Shanmukh Deekshit Kumar	Skilled Support Staff	Visakhapatnam Regional Centre	23.11.2015
Mr. Kiran K. M.	Skilled Support Staff	ICAR-CMFRI, Kochi	24.02.2016
Mrs. Emy K. Baby	Skilled Support Staff	ICAR-CMFRI, Kochi	31.03.2016
PROMOTION			
Name & Designation	Promoted as	Centre	w.e.f
Mr. K. Ramadasan, Assistant	Assistant Administrative Officer	ICAR-CMFRI, Kochi	09.10.2015
Mr. R. Sreenivasan, Assistant	Assistant Administrative Officer	Mandapam Regional Centre	15.10.2015
Mr. Vinod P. Bagayatkar, Upper Division Clerk	Assistant	Mumbai Research Centre	06.10.2015
Mr. J. Vinoth Prabhu Vaz, Upper Division Clerk	Assistant	Tuticorin Research Centre	09.10.2015 (A.N)
Ms. C. Pushpa Rani, Upper Division Clerk	Assistant	Tuticorin Research Centre	13.10.2015 (A.N)
TRANSFERS			
Name & Designation	From	To	w.e.f
Mr. Anirudh K., SSS	ICAR-CMFRI, Kochi	Calicut Research Centre	01.01.2016
Mrs. S. Saradha, Assistant	Tuticorin RC	Madras Research Centre	29.03.2016
Mr. W. Sathyawan Neelraj, UDC	Tuticorin RC	Madras Research Centre	29.03.2016
Mr. S. Maharajan, LDC	Mandapam RC	ICAR-CMFRI, Kochi	30.03.2016
INTER-INSTITUTIONAL TRANSFERS			
Name & Designation	From	To	w.e.f
Mr. N. Rajesh, Scientist	Regional Research Centre of CIFA, Bangalore	ICAR-CMFRI, Kochi	11.01.2016
Dr. T. G. Sumithra, Scientist	Indian Veterinary Research Institute, Izatnagar	ICAR-CMFRI, Kochi	15.02.2016
Dr. Shelton Padua, Scientist	National Bureau of Soil Survey & Land Use Planning, Regional Centre, Borbhetta, Jorhat	ICAR-CMFRI, Kochi	03.03.2016
COMPULSORY RETIREMENTS			
Name & Designation	From	To	w.e.f
Shri V. Sathiyanesan Senior Technical Assistant (Library)	Mandapam Regional Centre	-	22.02.2016
RESIGNATION			
Name & Designation	From	To	w.e.f
Mr. S. Dhamodharan Skilled Support Staff	Madras Research Centre	-	11.02.2016
MEETINGS			
1. 2 nd meeting of the 13 th IJSC of ICAR-CMFRI held on 29 th January, 2016 2. 79 th meeting of the Institute Management Committee of ICAR-CMFRI held on 29 th February, 2016 at Kochi. 3. 20 th RAC meeting of ICAR-CMFRI held on 28 th & 29 th March, 2016 at ICAR-CMFRI, Kochi			

RETIREMENTS ON SUPERANNUATION



Mr. M. Prasada Rao
Technical Officer
31.01.2016
Visakhapatnam
Regional Centre



Mr. A. Janakiraman
Skilled Support Staff
31.01.2016
Madras
Research Centre



Mrs. P. Thankaleelal
Assistant
29.02.2016
Madras
Research Centre



Mr. R. Appaya Naik
Senior Technical Asst.
29.02.2016
Mangalore
Research Centre



Mr. R. Kanakaraju
Skilled Support Staff
29.02.2016
Visakhapatnam
Regional Centre

In Memoriam

Dr. P. Parameswaran Pillai Principal Scientist (Retd.) passed away on 14.3.2016 at Kolkata. He joined ICAR-CMFRI as a Research Assistant in 1967 and was appointed as a scientist in 1976. He went on to head the Pelagic Fisheries Division during the period 1992-1996. He had also functioned as the Scientist in Charge of Minicoy Research Centre and Vizhinjam Research Centre of ICAR-CMFRI during his service in the institute. Early in his career, Dr. P. P. Pillai had made significant contributions on research in copepods which are important live feed in marine fish hatcheries, especially regarding their taxonomy and biology, resulting in the description of two new species, *Pseudodiaptomus jonesi* and *Labidocera pseudacuta*. Later he focused his research on Tunas and became well known for his research contributions that were published in reputed journals and Special Bulletins of the institute. He was a keen observer of the global trends in the tuna fisheries and contributed significantly as the Nodal Officer and representative from the scientific fraternity of India at the Indian Ocean Tuna Commission (IOTC). As Scientist-in-Charge, he dedicatedly contributed to the development of the Minicoy Research Centre established at Minicoy, Lakshadweep while at the Vizhinjam Centre, he was instrumental in obtaining a plot of land on 99 years lease, where the institute building presently stands. He also guided several students in their MSc and PhD programmes under the CAS programme of the Institute. In recognition of his contributions, Dr. P. P. Pillai was appointed as ICAR-Emeritus Scientist after his retirement, which tenure he completed at Vizhinjam Research Centre of ICAR-CMFRI.



Dr. P. Parameswaran Pillai



Mr. Suryakant Mukund Tandell
Skilled Support Staff
Mumbai Research Centre
08.01.2016



Mr. C. R. Mohanan
Skilled Support Staff
ICAR-CMFRI, Kochi
31.01.2016





Mass stranding of Short-finned pilot whales

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cadalmin

CMFRI Newsletter

Cadalmin, the CMFRI Newsletter is a quarterly publication of the Central Marine Fisheries Research Institute, Kochi. The publication gives an insight into the major events of the quarter, besides highlighting the salient findings in the research front and dissemination of technological know-how to the farming community.